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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,886	08/06/2003	Charles W. Shattuck	091395-9399	1608
23409	7590	05/18/2005	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			RIDDLE, KYLE M	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/635,886

Applicant(s)

SHATTUCK, CHARLES W.

Examiner

Kyle M. Riddle

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,9-15,20-23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,9-15,20-23,25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02222005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Drawings

1. The drawings filed on 22 February 2005 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 14, 15, 20-23, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadokawa (U.S. Patent 5,054,440) in view of Fernandez et al. (U.S. Patent 6,604,498).

Kadokawa discloses a cam follower device comprising:

- a main body with spaced apart support wall portions 7 having same-sized aperture openings (column 2, lines 20-21 and Figures 15 and 16);
- a shaft assembly having a first portion or hollow bush 12 with an outer diameter larger than the aperture openings and rotatably fitted around a second portion or steel shaft 8 extending through the support wall 7 openings (column 2, lines 18-21 and Figures 15 and 16);

Art Unit: 3748

- a cam follower with a roller outer ring 13 fitted around bush 12 and rotatable relative to the bush 12 and shaft 8 (column 2, lines 18-25 and Figures 15 and 16);

- the second portion of shaft 8 being non-rotatably fixed but the first portion of bush 12 allowed to slide or rotate with respect to the main body (column 2, lines 30-35);

- the second portion of shaft 8 is substantially concentric with the first portion of bush 12 and with the cam follower or ring 13 (Figures 15 and 16);

- the inner peripheral surface of the outer ring 13 and the outer peripheral surface of the bush 12 are made of anti-friction ceramic material and allowed to slide along each other or rotate relatively (column 2, lines 27-34);

- the outer ring 13 and bush 12 having approximately the same widths (Figures 15 and 16);

- the second portion of shaft 8 having an enlarged head portion that is substantially flush with the support wall 7 (Figures 15 and 16);

- the shaft 8, bush 12, and outer ring 13 having substantially complementary diameters (Figures 15 and 16).

Kadokawa fails to disclose first and second portions rotatable together with respect to the main body.

Fernandez et al. teach a roller finger follower comprising a main body with spaced apart sidewalls 17, 19 having first and second apertures (column 3, line 64 and Figures 2-3), a shaft assembly having a first portion or hollow axle 16a rotatably supported by roller bearings 18 and non-fixedly housing a second portion or two-part solid axial pins 22, 24 configured to be received in bore 15 of both sidewalls (column 3, lines 45-49, and Figure 3), a cam follower 10a

Art Unit: 3748

with roller 14 between the sidewalls and rotatable about the shaft assembly bearings 18 and hollow axle 16a (column 3, lines 46-49 and Figure 3), the first portion of axle 16a and second portion or pins 22, 24 being released from apertures in the sidewalls and thus being rotatable with respect to each other and the main body (column 4, lines 1-12 and Figure 3), the first and secondary portions 16a, 22, 24 being substantially concentric with each other and with the cam follower 10a and roller 14 (Figures 2 and 3), the roller 14 having an inner surface contacting an anti-friction means or rolling elements as bearings 18 (column 3, lines 45-49 and Figure 3), and the pins 22, 24, axle 16a, and roller 14 having diameters substantially complementary to each other (Figure 3). It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the teaching by Fernandez et al. in the apparatus of Kadokawa, since the use thereof would have provided an alternate rotation means for actuating the roller finger follower.

4. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being obvious over Kadokawa in view of Fernandez et al.

Kadokawa, as modified by Fernandez et al., disclose cam followers with side walls having apertures, pins or shafts through the apertures having certain diameters, a bush, axle, or sleeve fitted around the shaft having an inner and outer diameter, and a roller or ring with an inner and outer diameter rotatably mounted for following a cam. They, however, fail to disclose specific relative sizes of the wall aperture diameters compared to the outer diameters of the bush, axle, or sleeve.

Kadokawa teaches cam followers with varying sizes of wall aperture diameters compared to their respective bush, axle, or sleeve outer diameters. The inclusion of the cited specific ratios

Art Unit: 3748

of diameters is well within the skill of one having ordinary skill in the art depending on the specific anti-friction characteristics, space available, and material strength. Moreover, there is nothing in the record which establishes that the application of such represents a novel or unexpected result (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)).

Response to Arguments

5. Applicant's arguments filed 22 February 2005 have been fully considered but they are not persuasive.

6. Applicant's argue on the bottom of page 2 continuing to the top of page 3 that the references do not teach the claimed invention and only specifically cites one characteristic per reference without clearly explaining its significance. The suggestion of eliminating the bush 12 of Kadokawa and replacing the bush with rollers as shown in the figures clearly reads on the claimed limitations. The pin of Fernandez et al. is not shown as being fixed against rotation, however, the combination of the above two references makes obvious this limitation to one of ordinary skill.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3748

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

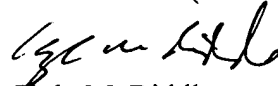
8. The IDS (PTO-1449) filed on 22 February 2005 has been considered. An initialized copy is attached hereto.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle M. Riddle whose telephone number is (571) 272-4864. The examiner can normally be reached on M-F (07:30-5:00) Second Friday Off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kyle M. Riddle
Examiner
Art Unit 3748

kmr


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